



"Mandis, Michelle (ECY)"  
<MICH461@ECY.WA.GOV>

11/30/2007 03:45 PM

To Dave Bartus/R10/USEPA/US@EPA

cc

bcc

Subject RE: Closure Permit Condition for SWOC units

Too funny!! :) I think you wits and my wits went to lunch....hopefully not permanently.....but if I catch them...I'll give ya a holler!

Have a great weekend too!

-----Original Message-----

From: Bartus.Dave@epamail.epa.gov [mailto:Bartus.Dave@epamail.epa.gov]

Sent: Friday, November 30, 2007 3:44 PM

To: Mandis, Michelle (ECY)

Subject: RE: Closure Permit Condition for SWOC units

Well stated, and I couldn't agree more. By the way, if you see my wits wandering around, please grab them for me and return at your convenience!

Have a great weekend....

"Mandis,  
Michelle (ECY)"  
<MICH461@ECY.WA.  
GOV>

11/30/2007 03:40  
PM

To

Dave Bartus/R10/USEPA/US@EPA,  
"Van Mason, Eric (ECY)"  
<EVAN461@ECY.WA.GOV>, "Ollero,  
Jennifer (ECY)"  
<joll461@ecy.wa.gov>, "Price,  
John (ECY)" <Jpri461@ECY.WA.GOV>,  
"Szendre, Steve (ECY)"  
<ssze461@ECY.WA.GOV>, "Wallace,  
Jeanne (ECY)"  
<JEWA461@ECY.WA.GOV>

cc

"Singleton, Deborah (ECY)"  
<dsin461@ECY.WA.GOV>, "Davis,  
Greta (ECY)"  
<GDAV461@ECY.WA.GOV>, "Conaway,  
Kathy (ECY)"  
<KCON461@ECY.WA.GOV>, "Menard,  
Nina (ECY)" <nmen461@ECY.WA.GOV>,  
"Skinnarland, Ron (ECY)"  
<RSKI461@ECY.WA.GOV>, "Mandis,  
Michelle (ECY)"  
<MICH461@ECY.WA.GOV>

Subject

RE: Closure Permit Condition for  
SWOC units

Dave~

Thanks for the clarifications and providing the appropriate language for permitting conditions. I think we can "close" the permit closure conditions....sorry for the pun, but it's late Friday afternoon.....:)

Thanks again,  
Michelle

-----Original Message-----

From: Bartus.Dave@epamail.epa.gov [mailto:Bartus.Dave@epamail.epa.gov]  
Sent: Friday, November 30, 2007 3:32 PM  
To: Mandis, Michelle (ECY)  
Cc: Singleton, Deborah (ECY); Van Mason, Eric (ECY); Davis, Greta (ECY); Ollero, Jennifer (ECY); Price, John (ECY); Conaway, Kathy (ECY); Mandis, Michelle (ECY); Menard, Nina (ECY); Skinnarland, Ron (ECY); Szendre, Steve (ECY)  
Subject: RE: Closure Permit Condition for SWOC units

Thanks, Michelle, both for the update and the excellent discussion we had yesterday. I would clarify your e-mail that the text you include really isn't a permit condition in of itself, but a description of what can and must be addressed by Ecology through the process of reviewing, editing and establishing as an enforceable requirement of the re-issue permit the closure plan submitted by the permit applicants. Given that this is a Friday and Greta is not in, I'll take the extreme liberty of citing the following permit conditions that Greta, Kathy (for the 242-A evaporator and the LERF/ETF operating unit groups), Jeanne (for the 331-C storage unit) and I have been working with (note that the numbering doesn't correspond to the Part III outline, since I've cut and pasted and thanks to Bill Gates, MS Word thinks it is far smarter than I am, which may not be too far from the truth some days....)

III.3.A.1        The Permittees will close dangerous waste management units in the LERF and the ETF in accordance with the Closure Plan in Addendum G. [WAC 173-303-610(3)(a)]  
III.3.A.2        The Permittees will amend the Closure Plan in accordance with Permit Condition II.J.2 and the Closure Plan in Addendum G. [WAC 173-303-610(3)(b)]  
III.3.A.3        The Permittees will provide Ecology with a Notice of Closure according to Permit Condition II.J.1. The notice of closure may apply to a subset of dangerous waste management units in the LERF and the ETF if they are to be closed in advance the remaining dangerous waste management units in Operating Unit Group 3. [WAC 173-303-610(3)(c)]

So, condition A.1 corresponds to the first sentence of your model, Michelle. In reviewing the draft closure plan, and modifying as necessary through the permit development process, permit writers must ensure that the resulting closure plan, when implemented, satisfies the requirements in the second sentence of the model. Essentially any decent closure plan should make at least some reference to the operating

record with regard to spills/release and subsequent responses to assure that final closure reflects the cited regulatory requirements and is protective of human health and the environment - the remainder of the model.

As a sidebar, I'd note condition A.2, which reflects the requirements of WAC 173-303-610(3)(b). This provision requires the permittees to periodically update the closure plan in response to circumstances identified in WAC 173-303-610(3)(b)(ii)(A) through (D), which include changes in operating plans or facility design that affect the closure plan, a change in the expected year of closure, unexpected events occur during closure that require modification of the closure plan, or when the permittees request alternative standards be established under the "post-closure rule" provisions for alternate closure and groundwater monitoring requirements. Energy is quite correct in most instances when they claim that the actual closure requirements for units expected to operate over an extended period of time may not be fully known at this time. The cited WAC provisions and permit conditions, however, clearly demonstrate that the facility must modify or "evolve" the closure plan over time through the permit modification process, starting from a closure plan that demonstrates compliance with "applicable requirements" in place at the time of permit issuance. The Permittees cannot simply defer establishing a closure plan until just before the time of closure.

Hope this helps, and thanks again for your work on these issues,  
Michelle!

"Mandis,  
Michelle (ECY)"  
<MICH461@ECY.WA.  
GOV>

11/30/2007 02:18  
PM

To  
"Mandis, Michelle (ECY)"  
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"Ollero, Jennifer (ECY)"  
<joll461@ecy.wa.gov>, "Szendre,  
Steve (ECY)"  
<ssze461@ECY.WA.GOV>, "Singleton,  
Deborah (ECY)"  
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cc  
Dave Bartus/R10/USEPA/US@EPA,  
"Davis, Greta (ECY)"  
<GDAV461@ECY.WA.GOV>, "Conaway,  
Kathy (ECY)"  
<KCON461@ECY.WA.GOV>, "Price,  
John (ECY)" <Jpri461@ECY.WA.GOV>,  
"Menard, Nina (ECY)"  
<nmen461@ECY.WA.GOV>,  
"Skinnarland, Ron (ECY)"  
<RSKI461@ECY.WA.GOV>

Subject  
RE: Closure Permit Condition for  
SWOC units

All~

Below is an updated Permit Condition for SWOC facilities....after more discussion with Dave and Greta.

Closure of the CWC facility (any SWOC facility) must adhere to requirements of the closure plan in the permit. In establishing the closure plan in the permit, Ecology must document that the performance of work under the closure plan satisfies the requirements of WAC 173-303-610(2)(a)(ii) as well as the unit-specific requirements applicable to the dangerous waste management unit pursuant to WAC 173-303-630 through -680. Documentation of spills and releases, such as pursuant to inspection plan requirements, and subsequent response to spills or releases of waste/waste constituents from a dangerous waste management unit (e.g. clean-up of spills, mitigation of contamination, etc.) will be reviewed and sampling may be conducted to verify that the site response action satisfies the closure performance standards established in the closure plan.

Thanks everyone for your input...hope this works!

Michelle

From: Mandis, Michelle (ECY)

Sent: Tuesday, November 20, 2007 6:28 PM

To: Van Mason, Eric (ECY); Ollero, Jennifer (ECY); Szendre, Steve (ECY); Singleton, Deborah (ECY)

Cc: 'Bartus.Dave@epamail.epa.gov'; Davis, Greta (ECY); Conaway, Kathy (ECY); Price, John (ECY)

Subject: Closure Permit Condition for SWOC units

A couple of weeks ago I was reviewing the 200-SW-2 OU Work Plan. This is the CERCLA investigation for 200 Area LLBGs, including the TSDs (excluding, but integrated with M-91 operations). Anyway, looking at the closure section, I had several questions. I spoke with John as he was working on the Non-radioactive dangerous waste landfill closure plan and permit. And we ended up contacting Dave Bartus.

From our discussions that day relative to LLBGs:

Dave Bartus noted that by definition all TSDs and past practice sites are Solid Waste Management Units. Through-out time Corrective Action has been applied to these units for sampling and spot remediation. There is EPA guidance to this affect. Also, John noted and Dave agreed that the units (whether TSDs or past practice) must have a closure that adheres to WAC 173-303-610(2)(a)(ii) that ...."controls, minimizes or eliminates to the extent necessary to protect human health and the environment, post-closure escape of dangerous waste, dangerous constituents, leachate, contaminated runoff, or dangerous waste decomposition products to the surface water, ground water, or the atmosphere; and..." Therefore, sampling is needed to ensure there

are no constituents present that could negatively impact this WAC regardless of how the TSD is closed; even for the TSDs or portions of the TSDs that operated before 1976 and/or when the State of Washington was given authority.

Thus, to draft a closure permit condition for CWC/WRAP/T-Plant (per your request Eric)....I would say something to the affect of:

Closure of the CWC facility (any SWOC facility) must adhere to WAC 173-303-610(2)(a)(ii). Operations and Maintenance documentation or documentation pertaining to any corrective actions (e.g. clean-up of spills, mitigation of contamination, etc.) will be reviewed and sampling may be conducted to verify that the site will meet the requirements of WAC 173-303-610(2)(a)(ii).

All, please feel free to edit/advise as needed.

Thanks and Happy T-Day,

Michelle Mandis, CHMM, PE  
372-7970/366-2530